operating manual *and* parts list

MODEL 2420-1

20 INCH

ROTARY MOWER

MODEL CONFORMS TO SAFETY STANDARDS SPONSORED BY OPEI PROGRAM
OUTDOOR POWER EQUIPMENT INSTITUTE
MODEL TESTED BY INDEPENDENT LABORATORY

YARD-MAN

1410 West Ganson Street — Jackson, Michigan 49202

PRINTED IN U.S.A.

0611-748 (1-72)

RULES FOR SAFE OPERATION

Your rotary mower is a precision piece of power equipment. Engineering skill and experience have been combined to provide the ultimate in safety and efficiency, however, as with any type of power equipment, carelessness or error on the part of the operator can result in injury. Exercise extreme caution at all times.

1. **KNOW YOUR MACHINE** Read the Owner's Manual carefully - learn how to operate your mower properly.
2. **MAKE SURE THE LAWN IS CLEAR** of sticks, stones, wire and other hazardous items from lawn before mowing. Such items are dangerous to both the mower and individuals in the vicinity of the mower.
3. **ADD FUEL** before starting engine - - - never when engine is hot or running.
4. **ALWAYS STOP ENGINE** (turn off switch or disconnect sparkplug wire) before attempting any repairs or adjustments.
5. **START ENGINE CAREFULLY** Always stand at side opposite discharge chute. **NEVER PLACE HANDS OR FEET UNDER THE MOWER OR NEAR THE DISCHARGE CHUTE WHILE THE ENGINE IS RUNNING.**
6. **DO NOT TILT MOWER** at extreme angle while engine is running. Cut grass on hills and banks sideways.
7. **STOP THE ENGINE** when not cutting grass.
8. **DO NOT ALLOW MINORS** to operate mower unless thoroughly instructed and and properly supervised.
9. **KEEP CHILDREN AND PETS AWAY** from area at all times during mowing operation.
10. **ALWAYS CHECK FOR DAMAGE** If you should strike some foreign object while mowing, stop your mower. Inspect for and repair any damage before restarting and operating the mower.

LAWN CARE

1. It is not advisable to cut off more than 1/3 of the total length of the grass at any one mowing.
2. When mowing thick, lush wet grass, start at outside of lawn and mow in counter-clockwise direction to prevent mower from recutting clippings from previous rounds.
3. When mowing thin or dry grass, start at outside of lawn and mow in clockwise direction to progressively discharge clippings to center of lawn where they can easily be removed.
4. Recommended normal cutting heights for different types of grass:

1½ to 2½ — Med. to Med. High	Marion blue grass	1 to 1½ — Low to Med. Low.	Bermuda
1½ to 2½ — Med. to Med. High	Kentucky blue grass	1 to 1½ — Low to Med. Low.	Zoysia
1 to 2 — Med. - Low to Med.	Fescues	1 to 2 — Med. - Low to Med.	Bent grass
1 to 2 — Med. - Low to Med.	Rye grass		

USING GRASS CATCHER

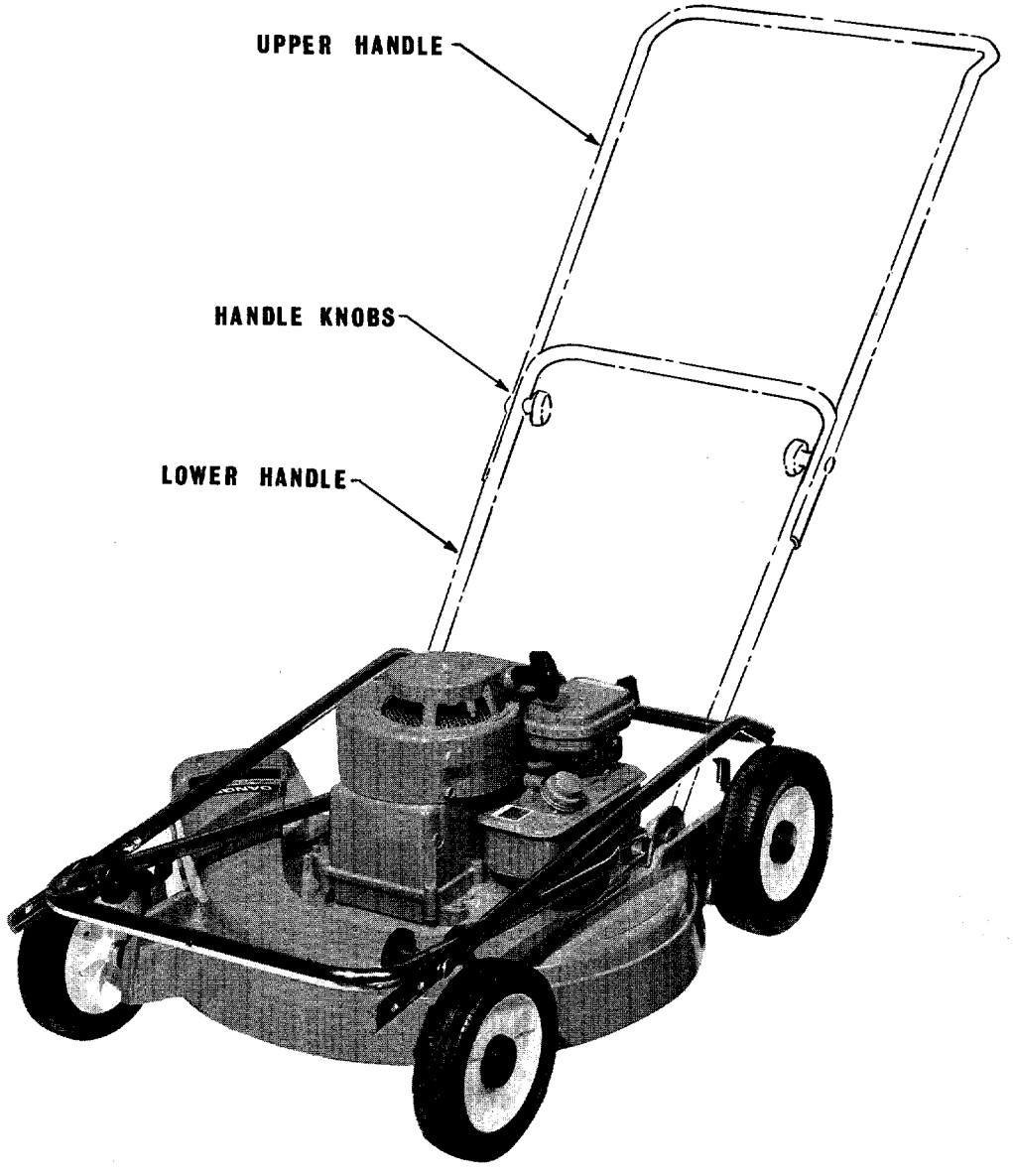
1. When using grass catcher, operate mower engine at ¾ to full throttle.
2. In heavy dense turf, set cutting height in medium to high position and mow in a counter-clockwise direction so the catcher will not drag in the uncut portion.
3. Allow wet grass to dry before attempting to mow with grass catcher attached.
4. Empty catcher bag thoroughly before storage.

SET UP

Your mower is shipped in one carton completely assembled with the handle assembly in the shipping or storage position. To remove your mower from the carton, slit the end of the carton and roll the mower out.

To place handle in operating position, make sure the handle knobs are loose enough to allow the upper section to pivot freely around the mounting bolts. Lift the handle assembly until the lower section snaps into the operating position, as shown. The upper section can now be moved into place. Tighten the handle mounting knobs.

NOTE: Make sure the handle knobs are loose enough to allow the upper section to pivot freely around the mounting bolts when placing the handle in either operating or storing position.



BEFORE STARTING ENGINE

Remove oil fill plug and fill the crankcase with S.A.E. No. 30 oil. (1¼ pints approx.)

Fill fuel tank completely full with a good grade regular clean, fresh gasoline. DO NOT MIX OIL WITH GASOLINE. FOR COMPLETE ENGINE INFORMATION, READ ENGINE INSTRUCTION BOOKLET BEFORE STARTING ENGINE.

TO START ENGINE

1. Place throttle control knob in FAST or RUN position.
2. While standing at the left side of the mower, opposite the discharge chute, pull the starter rope with a quick full stroke. Repeat if necessary.
3. When engine starts, move throttle control knob to slow speed until engine warms up.

NOTE: If engine floods, place throttle control knob in "Stop Position." Pull starter rope at least 4 times. This will clear the engine of excess gas. Then reposition control lever to "Run" position and follow the normal starting procedure.

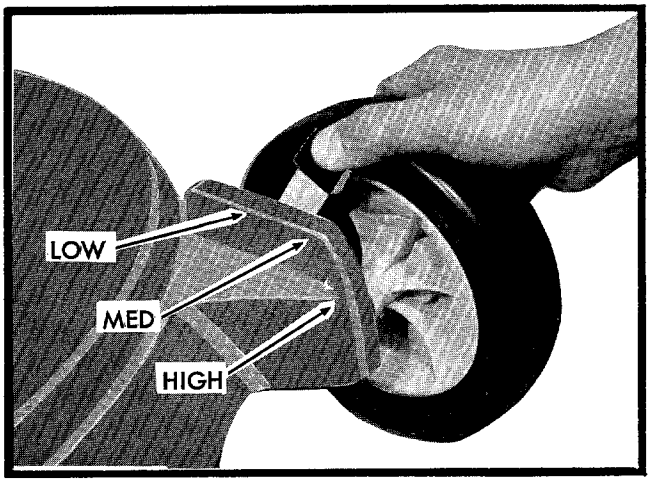
Engine flooding is usually caused by a dirty air cleaner. Service air cleaner regularly as noted in engine instruction manual.

If engine continues to flood even with a clean air filter, lean carburetor adjustment screw 1/8 turn. (See engine instructions)

TO ADJUST HEIGHT OF CUT

The cutting height of your mower can easily be adjusted from low to high cut. Place your hand on the outside of the wheel, spring the adjusting lever, with your thumb, outward until the locating trunnion on the lever is free from the housing. Move the wheel and lever to the height of cut desired. Release the lever, allowing the trunnion to drop into the proper locating hole.

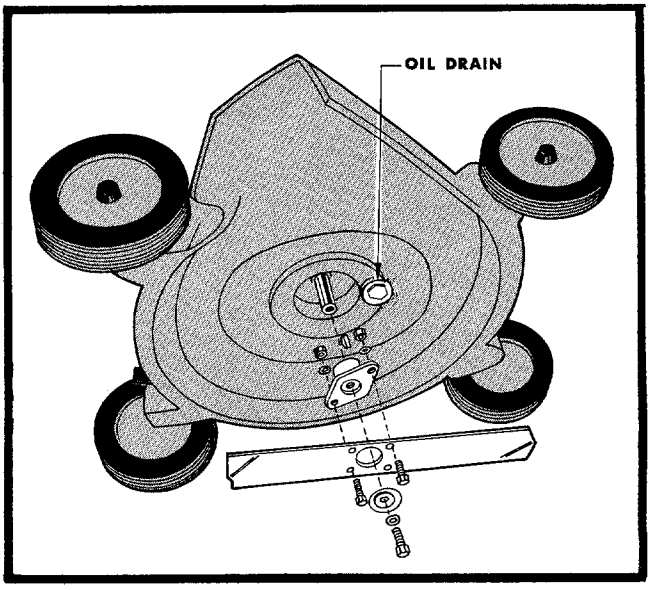
CAUTION: Do not make adjustments with the engine **running.**



TO CHANGE OIL

Engine oil should be changed after the first 5 hours of operation and each 25 hours of operation thereafter.

Drain oil while engine is warm. Disconnect spark plug wire and secure at least 1" away from spark plug. Block right hand side of mower up about 4" high and set shallow one quart container beneath oil drain. Remove oil drain plug from sump and allow oil to drain completely. Replace plug and refill with S.A.E. #30 oil. (1¼ pints approx.)



BREAK-IN PERIOD

During the first ten hours of operation, check the following items frequently:

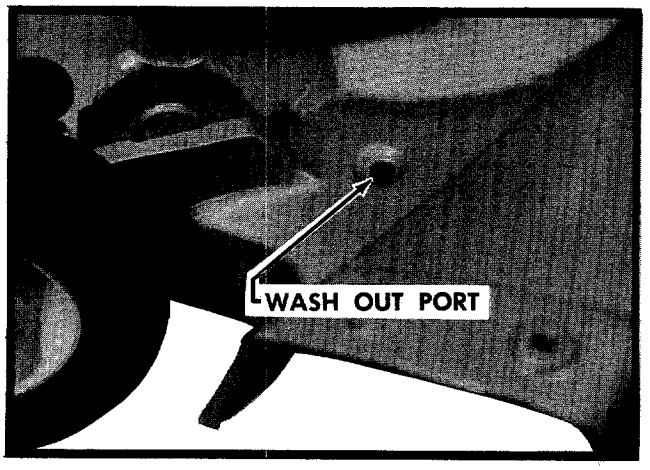
Oil Level
All nuts, bolts and screws for tightness
Condition of Blade

TO REPLACE BLADE

1, Be sure engine is stopped, disconnect spark plug wire and secure at least 1" away from spark plug.
2. Tip mower on the side and remove the blade and adaptor from engine crank.
3. Remove the blade from the adaptor and replace with a new blade. Reassemble to engine.
4. Resharpening of an old blade should only be attempted by a qualified service center. This way proper blade balance will be maintained.

TO USE WASH OUT PORT

After mowing, place hose end (without nozzle) into opening located next to discharge chute. Using moderate water pressure, run engine at full throttle speed for about two minutes. This flushes out accumulations of grass clippings from underneath mower housing. DO NOT wash the top. It may be necessary to tilt the mower back on the rear wheels after washing to drain any water which may have accumulated on the top of the housing.



SUGGESTIONS FOR MORE EFFICIENT, AND MAINTENANCE-FREE OPERATION

GENERAL MOWING

1. Always keep mower blade "Knife" sharp and bolanced for maximum cutting efficiency.
2. Always start engine with mower on level surface where blade will not drag on tall grass or other obstructions. After starting, let engine warm up several minutes at slow speed before starting to mow.
3. When mowing under normal conditions, run mower at ½ to ¾ throttle for best results.
4. When cutting tall heavy growth, or on rough ground, place mower in highest cut position and gradually reduce to desired cutting height over course of two or three mowings.
5. When cutting tall heavy lush grass the clippings may have a tendency to stick to the underside of the housing. Always keep underside of housing clean.

MAINTENANCE

Your mower like all machines with moving parts must receive care and maintenance. The following tips, if used, will contribute many trouble-free hours to your mower.

1. Check oil level frequently. When changing oil, make sure dirt and debris is cleaned off oil sump before removing oil plug.
2. Keep mower clean, especially the engine and underside of mower housing.
3. Check all nuts, bolts and screws occasionally to be sure mower is in good operating condition.
4. Should excessive vibration develop, check your blade and crankshaft immediately. Do not operate mower with an unbalanced blade, a damaged blade or a damaged crankshaft.
5. The wheel bearings are pre-lubricated at the factory and should require no further attention until mower is serviced. However, it is advisable to remove the wheels and apply a small amount of light oil to each axle, at least once a season.
6. If you are going to store your mower for any length of time (30 days or longer) it is important that the following steps be taken:
    a. Drain the gas tank. Start the engine and allow it to run out of gas. Gasoline left in the engine will leave gum deposits in the carburetor and gas tank.
    b. Clean engine of all foreign matter.
    c. Lubricate cylinder by removing the spark plug and pouring one ounce of clean lubricating oil through the spark plug hole into the cylinder. Crank engine slowly to spread oil and replace spark plug. To start after storage remove spark plug and rotate engine with starter to remove excess oil.
7. Just as your automobile needs professional mechanical maintenance from time to time, so does your air cooled engine. A yearly tune-up and check by a qualified service center is recommended to avoid breakdowns and unnecessary delays during the cutting season.

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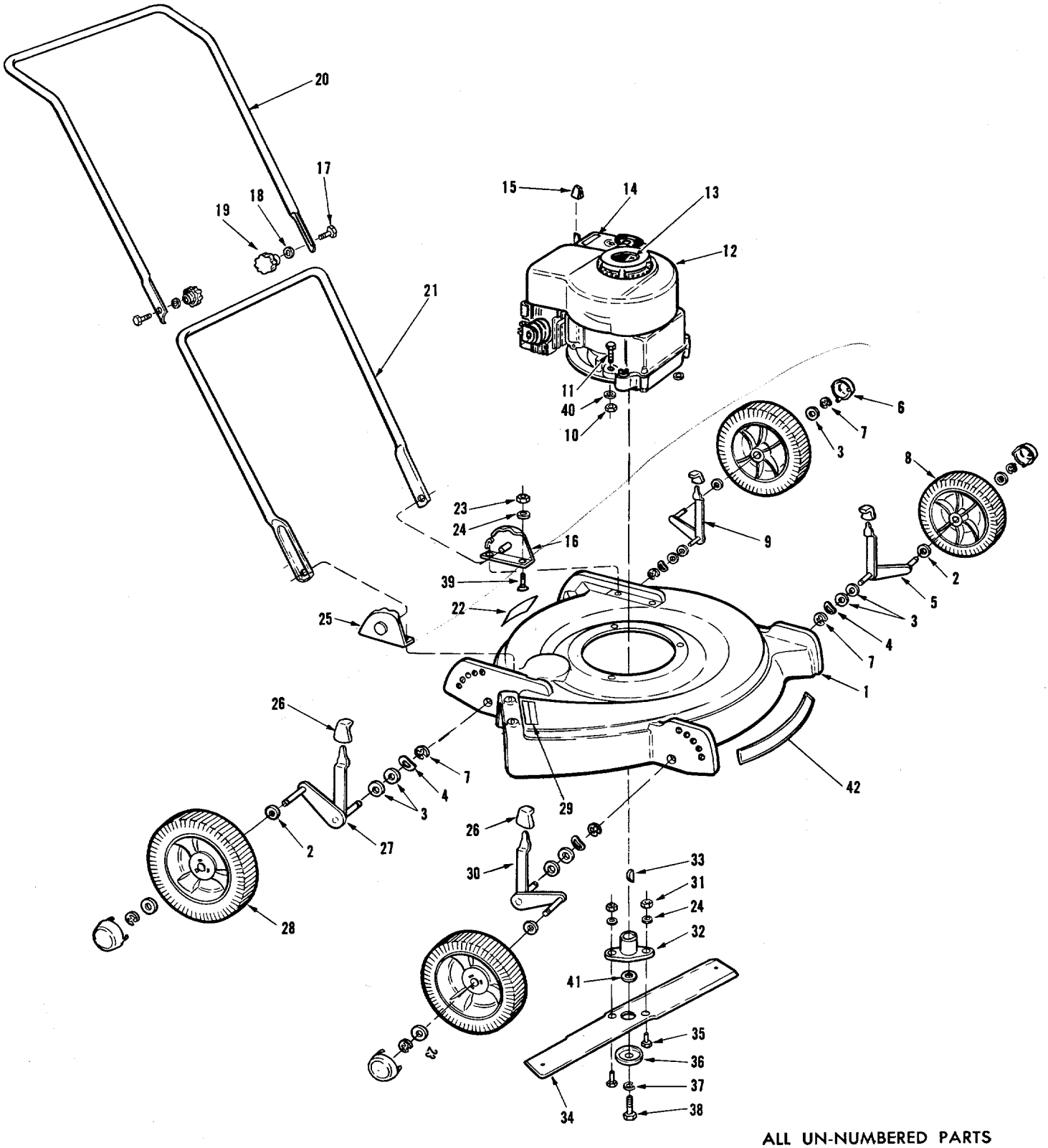


ALL UN-NUMBERED PARTS INTER-CHANGEABLE WITH OPPOSITE SIDE.

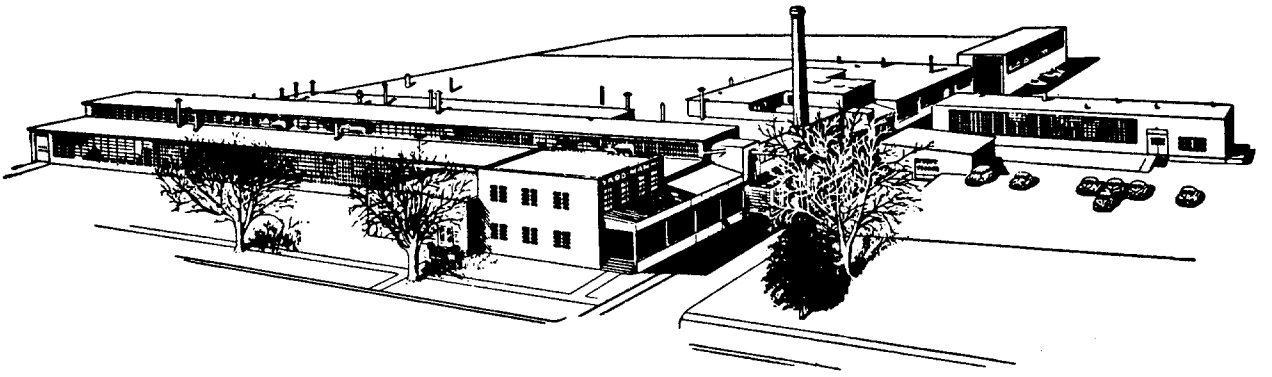
PARTS LIST

MODEL 2420-1

When ordering parts listed as L.H. or R.H.—determine the left or right hand side of your mower by standing behind the unit as you mow.

REF. NO.	PART NO.	NAME OF PART
1	6601-165-55	Blade Housing
2	1540-86	Washer (½ x 1.0 x ⅛)
3	1540-90	*Washer (½ x 1.0 x .030)
4	1552-2	*Washer—Wave
5	2123-31	Ass'y—Front Axle (L.H.)
6	2674-39-40	Hub Cap
7	1650-1	Retaining Ring
8	2108-183-41	Ass'y—Wheel & Tire (7 x 1.75)
9	2123-33	Ass'y—Rear Axle (L.H.)
10	1538-6	*Nut—Lock (5/16-18 Hex Head)
11	1509-75	*Bolt (5/16-18 x 1½ Hex Head)
12		Ass'y—Engine Briggs & Stratton Model 92502—Type 0836-01
13	1616-560	Label—Engine
14	1616-472	Label—Throttle Control
15	2643-28	Knob—Throttle
16	2132-87-55	Ass'y—Bracket & Pin (L.H.)
17	1513-103	Bolt (5/16-18 x 1¾ Special)
18	1025	Washer (5/16 Split Lock)
19	1643-47	Knob—Handle
20	3712-100-01	Handle—Upper
21	3712-83-01	Handle—Lower
22	1605-606	Name Plate
23	1538-19	*Nut (¼-20 Hex Lock)
24	1018	*Washer—Lock (¼ Split)
25	2132-86-55	Ass'y—Bracket & Pin (R.H.)
26	2643-43	Knob—Adjust Lever
27	2123-32	Ass'y—Rear Axle (R.H.)
28	2108-187-41	Ass'y—Rear Axle (R.H.)
29	1616-343	Label—Caution
30	2123-30	Ass'y—Front Axle (R.H.)
31	1538-8	*Nut (¼-20 Hex Hd. Lock)
32	1143-5-55	Ass'y—Blade Adaptor
33	1646-8	Key (#6 Woodruff)
34	3604-39-55	Blade—Grass
35	1509-34	*Bolt (¼-20 x ¾ Hex Hd.)
36	1543-39	Washer—Special
37	1542-8	*Lockwasher (⅜ Split)
38	1509-101	*Bolt (⅜-24 x 1⅛ Hex Hd. Lock)
39	1529-15	Bolt ¼-20 x ⅝ Carriage)
40	41-046	Washer (11/32 x ⅞ x 3/32)
41	1624-135	Washer (⅜ x 1.0 x .210)
42	2616-565	Label—Housing

*Standard Hardware Item, May Be Purchased Locally.



WARRANTY

We guarantee all parts against defects in material and workmanship for a period of one (1) year from the date of purchase when used for residential. 90 days for commercial.

We agree to repair or replace without charge to the original Purchaser, including labor, any part or parts upon examination by a Yard-Man Authorized Dealer to be defective within the guarantee period except the engine which is warranteed separately by the manufacturer. **All transportation charges for replacement under this guarantee must be paid by the Purchaser.**

This guarantee will not apply to a unit which has been subjected to misuse, negligence, accident or to a unit which has been altered in any way.

YARD-MAN

Yard-Man reserves the right to make engineering changes without prior notification or responsibility to the Purchaser.